

REMARKS

Claims 1-9 were examined and reported in the Office Action. Claims 1- 4 are rejected. Claims 5 - 9 are objected to. Claims 1 - 3 are amended. Claims 4 - 9 have been canceled. New claims 10-20 have been added. Claims 1-3 and 10-20 remain. Attached hereto is a marked-up version of the amendments to the application as indicated above.

Applicant requests reconsideration of the application in view of the following remarks.

I. 37 CFR 1.75(c)

It is asserted in the Office Action that claims 5-9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim may not depend from a multiple claim. Applicant has canceled claims 5-9 and submits new claims 10-20 in order to overcome the 37 CFR 1.75(c) objections.

Accordingly, withdrawal of the 37 CFR 1.75(c) objections for claims 5 - 9 are respectfully requested.

II. 35 U.S.C. § 112 second paragraph

It is asserted in the Office Action that claims 1-4 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant has amended claims 1-3 and canceled claim 4 to overcome the 35 U.S.C. § 112, second paragraph, rejection.

Accordingly, withdrawal of the 35 U.S.C. § 112, second paragraph, rejection for claims 1 - 4 is respectfully requested.

III. 35 U.S.C. § 102(a)

It is asserted in the Office Action that claims 1-3 are rejected under 35 U.S.C. § 102(a) as being anticipated by European Application No. EP 0829,830 issued to Hirokawa et al. ("Hirokawa"). Applicant respectfully disagrees.

Applicant's amended claim 1 contains the limitations of "... a bank card of the category with a microprocessor chip and of a reading terminal able to interact with said card, in which the reading terminal sends a signal to said card which indicates thereto the amount of the transaction and in which said card performs a first comparison step where it compares this amount with a first threshold value and instigates a bearer authentication procedure when this amount is above said first threshold, wherein, when the amount of the transaction below said first threshold, said chip card performs a second comparison step where it compares with a second threshold value an incremented value of a first counter, said first counter being named aggregate of small amounts counter and being successively incremented by values of amounts of transaction in cases where said amounts are below said first threshold, said incremented value corresponding to the previous value of said first counter, incremented by the value of the amount of transaction, and wherein a procedure for authenticating the bearer of the card is instigated by said card depending on the result of this second comparison." In other words Applicant's claimed invention manages an electronic transaction using a bank credit card with microprocessor chip. An important aspect of Applicant's claimed invention relates to being able to carry out transactions of small amounts with a bank credit card, without implementing the authentication procedure, which is conventionally and routinely implemented with bank credit cards. Applicant's claimed invention allows, by not performing the authentication for certain amounts, to make transactions carried out by using bank credit cards faster on average.

A claim is said to be "anticipated" if comparison of the claimed invention with a prior art reference reveals that every element in the claim under attack is shown or described, organized, and functioning in substantially the same manner as

in the prior art reference. (*In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986)). The standard for anticipation is rigorous requiring that every element of the claimed invention, as arranged in the claim, be disclosed either specifically or inherently by a single prior art reference. (See, *Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir.1992); *Scripps*, 927 F.2d at 1576-77; *Lindemann Maschinenfabrik GMBH, v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir.1984)). Every element of the challenged claim need not be expressly delineated in the single prior art reference, but may be inherently disclosed by prior art if "the prior art necessarily functions in accordance with the limitations" of the challenged claim. (*King*, 801 F.2d at 1326; see also *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1369 (Fed. Cir. 1991), cert. denied, 506 U.S. 817, 113 S. Ct. 60, 121 L. Ed.2d 28 (1992)). Judge Learned Hand succinctly explained the status of anticipation by saying:

No doctrine of the patent law is better established than that a prior patent or other publication to be an anticipation must bear within its four corners adequate directions for the practice of the patent invalidated. If the earlier disclosure offers no more than a starting point for further experiments, if its teaching will sometimes succeed and sometimes fail, if it does not inform the art without more how to practice the new invention, it has not correspondingly enriched the store of common knowledge, and it is not an anticipation. (*Dewey & Almy Chem. Co. v. Mimex Co.*, 124 F.2d 986, 52 USPQ 138 (2d Cir. 1942)).

Hirokawa discloses electronic purses where a card bearer authentication procedure (s220, figure 5) is implemented when the amount of the transaction or the aggregated amount of the transactions carried out are greater than given thresholds (figure 4). Hirokawa, however, does not concern bank credit cards. Instead, Hirokawa concerns electronic purses (see e.g., column 1, lines 1 – 3, 8 – 11, 13 – 15; column 2, line 5; etc.). In particular, no reference is made in Hirokawa to a transaction carried out using a bank credit card, i.e. a credit card allowing to debit a card bearer's bank account (column 2, lines 14-15).

Moreover, electronic purses have drawbacks. In particular, electronic purses do not ensure the same security of transactions as bank cards that implement the bank credit card transaction protocol (see Hirokawa, column 2, lines 9-18; column 4, lines 54-58; column 5, lines 13-15). Further, Applicant's claimed invention allows for transactions far more secure than those carried out by electronic purses as it relies effectively upon the existing infrastructure in respect of bank credit cards to debit the bank account of the card's bearer.

Since Hirokawa does not teach, disclose or suggest the limitations contained in Applicant's amended claim 1, Applicant's amended claim 1 is not anticipated by Hirokawa. Additionally, the claims that directly or indirectly depend on Applicant's amended claim 1, namely claims 2, 3 and 10-20, also contain the same limitations and are also not anticipated by Hirokawa for the same reasons.

Accordingly, withdrawal of the 35 U.S.C. § 102(a) rejection for claims 1-3 is respectfully requested.

IV. NO NEW MATTER

Applicant's amendments to Figure 2 and the specification are submitted for clarification purposes. As the discussion regarding Figures 1 and 2 regard different modes, the reference symbols regarding the two modes (i.e., Figure 1 and Figure 2) are now further distinguished for clarification. Thus, amendments do not introduce new matter into the Application.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely 1-3 and 10-20, patentably define the subject invention over the prior art of record and are in condition for allowance and such action is earnestly solicited at the earliest possible date.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

The paragraph beginning on page 7, line 6, has been amended as follows:

This second variant consists in managing a second counter CPT22 in the card accumulating the aggregates performed on a first counter CPT12 of small amounts. If the value of the counter CPT22 reaches a second ceiling value VP2, defined by the bank and registered previously in the card, the card will demand the checking of a certificate calculated by an authorization center.

The paragraph beginning on page 7, line 15, has been amended as follows:

The card adds the amount M of the transaction to the value read from CPT12.

The paragraph beginning on page 7, line 17, has been amended as follows:

If (test 13) the sum $CPT12+M$ reaches the ceiling value, VP1, the card demands the checking of the bearer's confidential code (steps 10, 11 and 12).

The paragraph beginning on page 7, line 20, has been amended as follows:

If the confidential code is correct, the card adds the value of $CPT12+M$ to the value read from CPT22.

The paragraph beginning on page 7, line 24, has been amended as follows:

If the sum $CPT12+M+CPT22$ reaches the ceiling VP2, the card demands (step 15) the checking of a certificate computed by an authorization center interrogated by the terminal of the reading terminal L (step 16).

The paragraph beginning on page 7, line 29, has been amended as follows:

If the certificate is correct, the card resets the counters $CPT12$ and $CPT22$ to zero (step 17) and then computes and delivers the signature of the transaction (steps 7 et seq.).

The paragraph beginning on page 7, line 33, has been amended as follows:

If the certificate is incorrect, the card does not deliver the signature of the transaction and leaves the values of the counters $CPT12$ and $CPT22$ unaltered.

The paragraph beginning on page 7, line 36, has been amended as follows:

If the sum of $CPT12+M+CPT22$ has not reached the ceiling value $VP2$, the card resets the counter $CPT12$ to zero and updates the counter $CPT22$ by replacing its previous value with $CPT22+CPT12+M$ (step 18). Next it computes and delivers the signature of the transaction (steps 7, 8 and 9).

The paragraph beginning on page 8, line 7, has been amended as follows:

If the sum $CPT12+M$ does not reach the ceiling value $VP1$, the card updates the counter $CPT12$ by replacing its previous value with the sum $CPT12+M$ (step 19), and it then delivers the signature of the transaction (steps 7, 8 and 9).

The paragraph beginning on page 10, line 1, has been amended as follows:

In the example above, the counters ~~$CPT1$ and $CPT2$~~ are incremented from the value 0 to a ceiling value. It is also possible to count downwards, the counters being initialized to the ceiling value $VP1$ and $VP2$ and then decremented down to the value 0, the counting can also be done on negative values etc.

IN THE CLAIMS

Claims 1, 2 and 3 have been amended as follows:

1. (Amended) Process for managing an electronic transaction by means of a bank card of the category with a microprocessor chip type and of a reading terminal able to interact with ~~talk to~~ said card, in which the reading terminal sends a signal to said card which indicates thereto the amount of the transaction and in which said card performs a first comparison step where it compares this amount with a first threshold ~~transaction amount~~ value and instigates a bearer authentication procedure when this amount is above said first threshold, wherein, when the amount of the transaction, characterized in that, when this amount is below said first threshold, said chip card performs a second comparison step where it compares with a second threshold value an incremented value of a first counter, said first counter being named aggregate of small amounts counter and being successively incremented by values of amounts of transaction in cases where said amounts are below said first threshold, said incremented value corresponding to the previous value of said first counter, incremented by the value of the amount of transaction, and wherein ~~the value of a counter, the so-called aggregate of small amounts counter, which value it increments by the value of the amount of the transaction and in that~~

a procedure for authenticating the bearer of the card is instigated by said card ~~depending on as a function of the result of this second comparison.~~

2. (Amended) Process according to Claim 1, wherein the first counter automatically stores ~~characterized in that the value of the counter is replaced with~~ said incremented value when the value of the amount of the transaction is below the first ~~threshold transaction amount value.~~

3. (Amended) Process according to Claim 2, wherein said first counter automatically stores said incremented value before the second comparison step, said second comparison step consisting in the comparison of the stored value of said first counter with said second threshold ~~one of the preceding claims, characterized in that the value of the aggregate of small amounts counter is replaced with said incremented value when, as a function of the result of the comparison, the card bearer authentication procedure is not instigated by said card.~~

Claims 4 - 9 have been canceled.

New Claims 10 - 20 have been added.